

Mathematics, Grades 4, 8, and 11

Chart 1: 4, 8, 11 M

The chart below shows the National Percentile Ranks for grades 4, 8, and 11

- In 2001, grade 4 scored an NPR of 62%, grade 8 a NPR of 57%, and grade 11 a NPR of 61%.
- In 2002, scores for grades 4 and 11 remained consistent while grade 8 increased slightly.
- In 2003, NPR scores increased slightly in all three grades tested.
- In 2004, NPR scores increased slightly in grades 4 and 8 while grade 11 remained the same as in 2003.

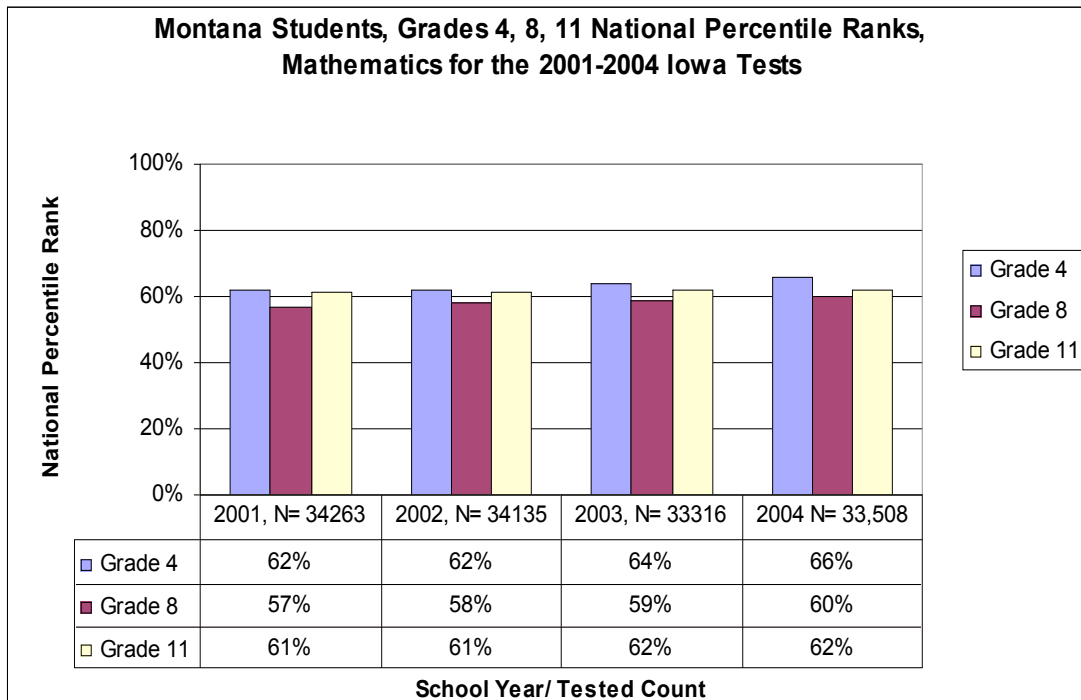


Table 1: 4, 8, 11 M

Math National Percentile Rank for each disaggregation across Montana in 2001, 2002, 2003, and 2004.

Groups	Grade 4				Grade 8				Grade 11			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
All Students	62%	62%	64%	66%	57%	58%	59%	60%	61%	61%	62%	62%
Students Without Disabilities	66%	65%	67%	69%	60%	62%	63%	64%	64%	64%	65%	65%
Students With Disabilities	31%	31%	35%	40%	25%	23%	24%	27%	26%	26%	28%	26%
Female Students	60%	61%	63%	65%	58%	59%	60%	60%	60%	61%	62%	61%
Male Students	62%	63%	64%	67%	57%	57%	58%	60%	62%	62%	63%	63%
Native American Students	40%	40%	41%	46%	33%	32%	36%	37%	41%	39%	40%	39%
White Students	66%	65%	67%	69%	60%	62%	63%	63%	63%	63%	65%	64%
Students on Free/Reduced Lunch	51%	50%	53%	55%	45%	45%	45%	48%	49%	48%	50%	48%
LEP*	N/A	70%	70%	77%	N/A	74%	71%	76%	N/A	74%	76%	77%

*LEP 2001 data were incomplete.

Table 2: 4, 8, 11 M

Math: The table below shows the percentage of students for each disaggregation scoring in each performance category in grades 4, 8, and 11 for 2001, 2002, 2003, and 2004.

Groups/Year		Grade 4				Grade 8				Grade 11			
		Advanced Stanines 8-9	Proficient Stanines 5-7	NP Stanines 4	Novice Stanines 1-3	Advanced Stanines 8-9	Proficient Stanines 5-7	NP Stanines 4	Novice Stanines 1-3	Advanced Stanines 8-9	Proficient Stanines 5-7	NP Stanines 4	Novice Stanines 1-3
All Students	2001	14%	59%	14%	12%	15%	54%	15%	16%	17%	59%	12%	12%
	2002	14%	58%	15%	13%	14%	54%	15%	17%	17%	59%	12%	12%
	2003	16%	59%	13%	12%	15%	55%	14%	16%	17%	60%	12%	11%
	2004	18%	60%	13%	10%	15%	56%	15%	15%	17%	58%	12%	13%
Students Without Disabilities	2001	16%	61%	13%	9%	16%	57%	15%	12%	18%	62%	11%	9%
	2002	16%	61%	13%	10%	16%	58%	14%	12%	18%	62%	11%	9%
	2003	17%	62%	12%	9%	16%	58%	14%	12%	18%	63%	11%	8%
	2004	19%	62%	12%	7%	17%	60%	14%	10%	19%	61%	11%	9%
Students With Disabilities	2001	2%	34%	22%	42%	1%	19%	21%	59%	1%	23%	25%	52%
	2002	3%	31%	22%	44%	1%	19%	22%	58%	1%	22%	23%	54%
	2003	4%	36%	22%	38%	1%	22%	21%	56%	2%	25%	22%	51%
	2004	6%	40%	23%	32%	2%	23%	23%	53%	1%	24%	22%	53%
Female Students	2001	13%	60%	15%	12%	13%	57%	16%	14%	15%	63%	12%	10%
	2002	13%	59%	15%	13%	13%	58%	15%	14%	14%	61%	14%	11%
	2003	14%	61%	13%	11%	14%	58%	14%	14%	14%	64%	12%	10%
	2004	16%	61%	14%	10%	14%	59%	14%	13%	14%	61%	13%	12%
Male Students	2001	16%	58%	14%	13%	16%	50%	15%	19%	20%	56%	11%	13%
	2002	16%	57%	13%	14%	15%	51%	15%	19%	19%	56%	12%	13%
	2003	17%	57%	14%	12%	15%	51%	15%	19%	20%	57%	11%	13%
	2004	19%	58%	12%	10%	16%	52%	15%	16%	20%	55%	11%	14%
Native American Students	2001	4%	43%	23%	29%	3%	32%	21%	44%	5%	43%	19%	33%
	2002	4%	42%	23%	31%	2%	31%	21%	46%	4%	41%	22%	33%
	2003	5%	44%	21%	29%	5%	34%	23%	38%	4%	42%	21%	32%
	2004	7%	48%	21%	25%	3%	38%	22%	36%	4%	42%	20%	34%
White Students	2001	16%	61%	13%	10%	16%	57%	14%	12%	19%	61%	11%	10%
	2002	16%	61%	13%	10%	16%	57%	15%	12%	18%	60%	12%	10%
	2003	17%	61%	12%	9%	16%	58%	13%	13%	18%	62%	11%	9%
	2004	19%	61%	12%	8%	17%	58%	14%	11%	19%	60%	11%	10%
Students on Free/ Reduced Lunch	2001	7%	55%	18%	20%	7%	44%	20%	30%	9%	51%	17%	23%
	2002	7%	52%	19%	22%	7%	44%	19%	30%	8%	51%	18%	23%
	2003	9%	55%	18%	19%	7%	45%	19%	28%	8%	53%	18%	21%
	2004	10%	56%	18%	17%	7%	47%	21%	25%	8%	49%	18%	24%
	2001	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
	2002	2%	28%	25%	45%	2%	20%	20%	58%	5%	30%	22%	43%

*LEP 2001 data were incomplete.

Table 3: 4, 8, 11 M

Customized Skills Reports: Montana Mathematics standards tested in the 2001, 2002, 2003, and 2004 Iowa Tests

	Standard	Use math processes to solve problems, estimate and communicate		Use numbers and operations	Use algebraic concepts, processes and language.	Understand shape and use geometry	Understand and use measurement attributes and processes	Use data analysis, probability and statistics.	Use patterns, relations and functions
Grade 4	# of Items		29	67	10	7*	9*	16*	NA
	Percent Correct	01	64%	64%	72%	66%	52%	63%	9
		02	64%	64%	72%	67%	51%	63%	59%
		03	65%	65%	73%	68%	52%	64%	60%
		04	66%	66%	75%	70%	53%	65%	61%
Grade 8	# of Items		42	81	18	7*	13*	19	4*
	Percent Correct	01	57%	53%	58%	53%	55%	68%	64%
		02	56%	53%	58%	53%	55%	67%	64%
		03	56%	54%	58%	54%	54%	68%	65%
		04	57%	54%	59%	53%	54%	69%	66%
Grade 11	# of Items		29	46*	15*	NA	7*	5*	5*
	Percent Correct	01	55%	56%	56%	NA	46%	62%	53%
		02	55%	56%	56%	NA	45%	62%	54%
		03	55%	57%	57%	NA	47%	62%	55%
		04	55%	57%	57%	NA	46%	61%	54%

* The Iowa Tests measure the knowledge dimension of the Montana Standard, but do not adequately measure the application aspect.

Tables 4a and 4b: 11 M

ACT Mathematics results for high school graduating classes of 2001, 2002, and 2003. Information for the graduating class of 2004 unavailable at the time of printing.

	Average Score All National	Average Score All Montana	Average Score White Montana	Average Score Native American Montana
2001	20.7	21.3	21.6	17.1
2002	20.6	21.4	21.45	17.65
2003	20.6	21.4	21.7	17.1

Number of Montana students participating in the ACT

	Total Montana Students	White Montana	Native American Montana
2001	6,641	5,699	319
2002	6,368	5,460	300
2003	6,470	5,514	282

Tables 5a and 5b: 11 M

SAT Mathematics results for the high school graduating classes of 2001, 2002, 2003, and 2004.

	Average Score All National	Average Score All Montana	Average Score White Montana	Average Score Native American Montana
2001	514	539	541	468
2002	516	547	549	500
2003	519	543	545	473
2004	513	545	537	500

Number of Montana students participating in the SAT in 2001, 2002, and 2003.

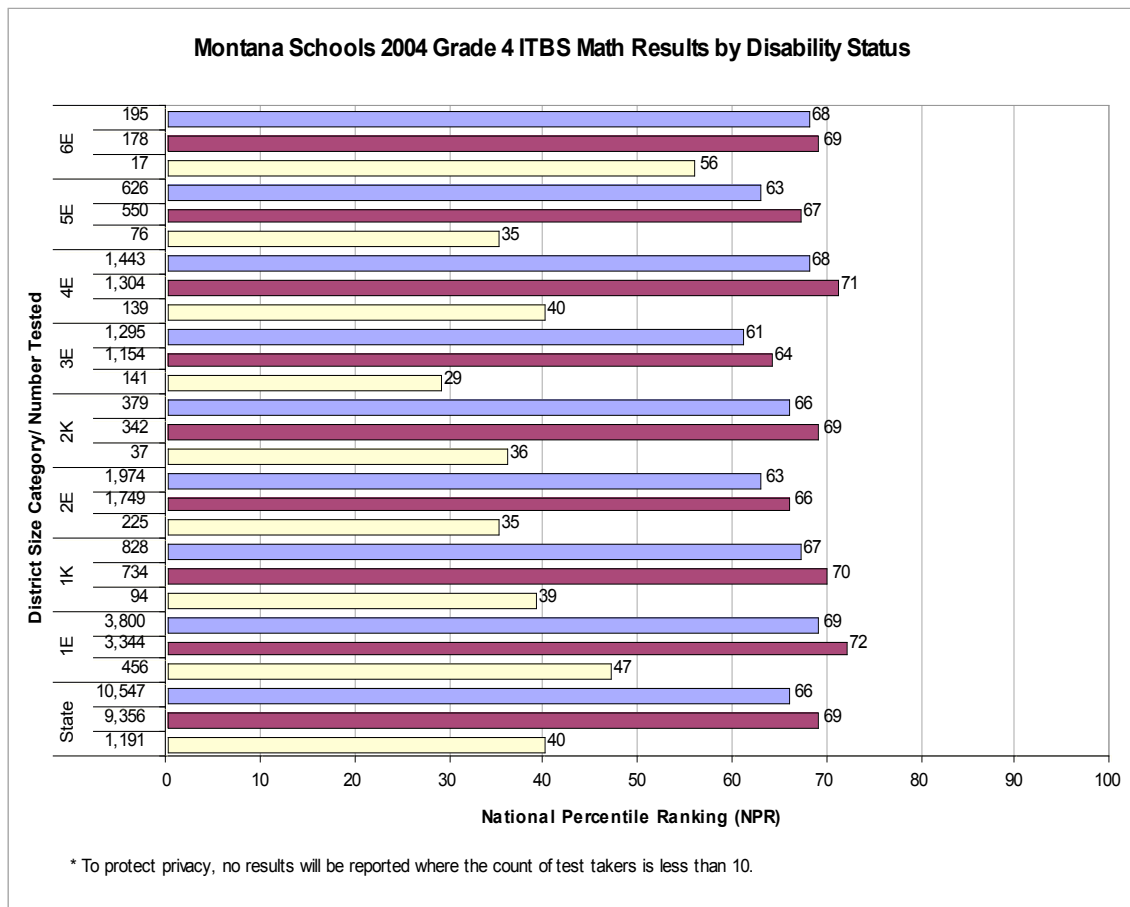
	Total Montana Students	White Montana	Native American Montana
2004	2,592	2,155	41

Table 6: 4, 8, 11 M

NAEP data from 1990, 1996, 2000 and 2003 are included to add to the picture of student achievement in Math. Although NAEP data give us another perspective to the picture of Montana students tested in these years, it is not a statewide assessment, but rather a representative random sampling of the students in 4th and 8th grades in the years identified.

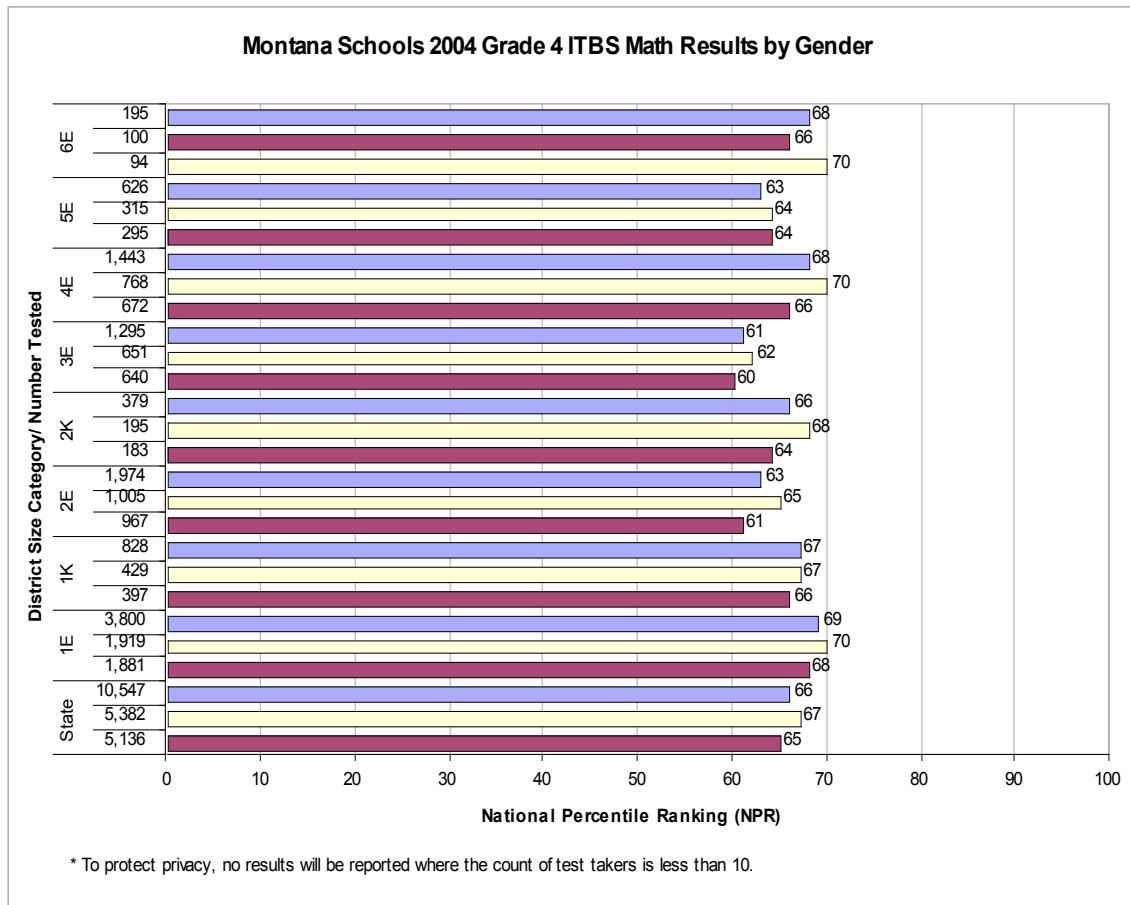
Mathematics Average Scale Scores							
Grade	Year	All National	All Montana	White National	White Montana	Native American National	Native American Montana
4	1996	222	228	230	231	---	206
4	2000	224	228	233	231	207	208
4	2003	234	236	243	238	224	217
8	1990	262	280	269	282	---	259
8	1996	271	283	280	286	---	264
8	2000	272	285	283	288	263	257
8	2003	276	286	287	289	265	260

Chart 4.1 M



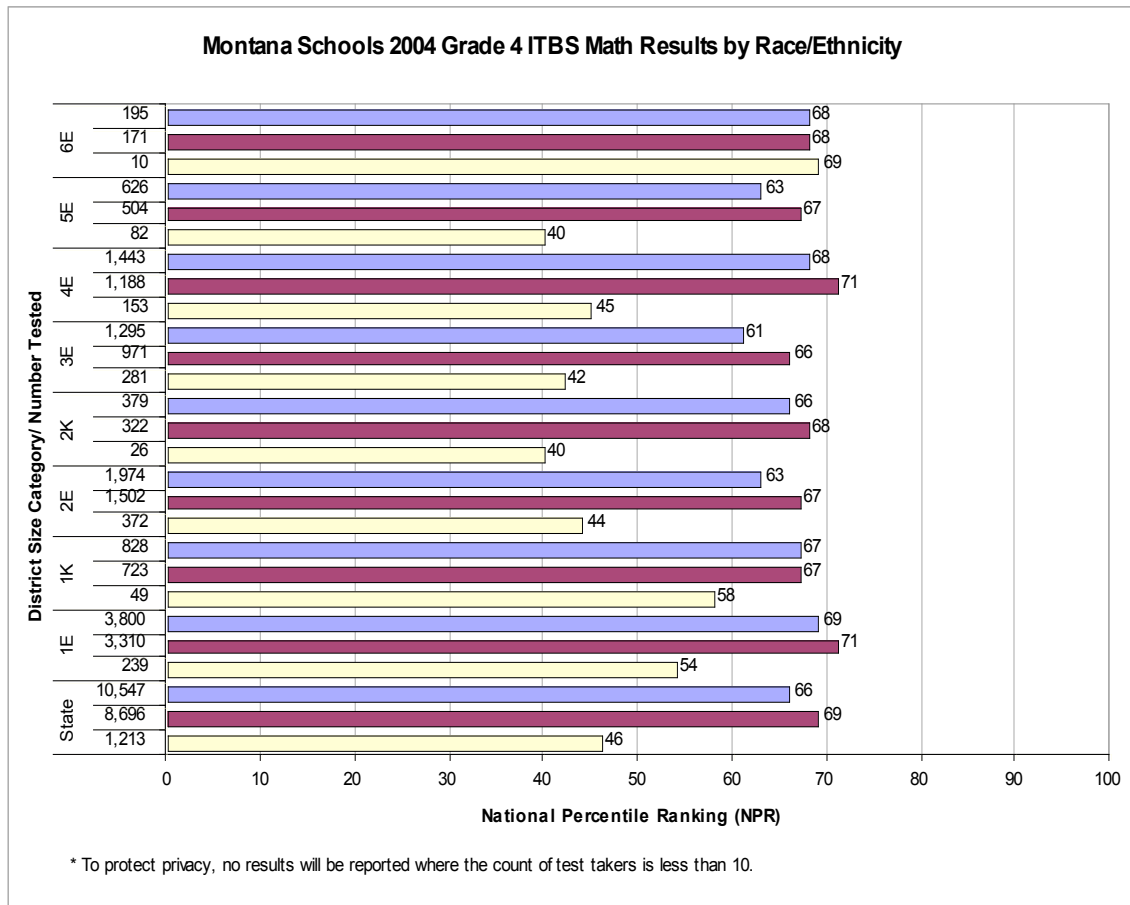
1. All students
 - The Math NPR for all Montana grade 4 students is 66%, two percentage points above 2003.
2. Students without disabilities
 - Statewide, the NPR for students without disabilities is 69%, two percentage points above 2003. That number is relatively stable with all districts plus or minus 2-4 percentage points except district size category 3E with 64%.
3. Students with disabilities
 - Statewide, the NPR for students with disabilities is 40%, five percentage points above 2003. That number is relatively stable with all districts plus or minus 4-6 percentage points except 1E with 47%, 3E with 29%, and 6E where the number of students tested is too small for comparison.
4. Comparisons
 - Statewide, Montana students without disabilities scored 29 percentage points above students with disabilities, 69% and 40% respectively.

Chart 4.2 M



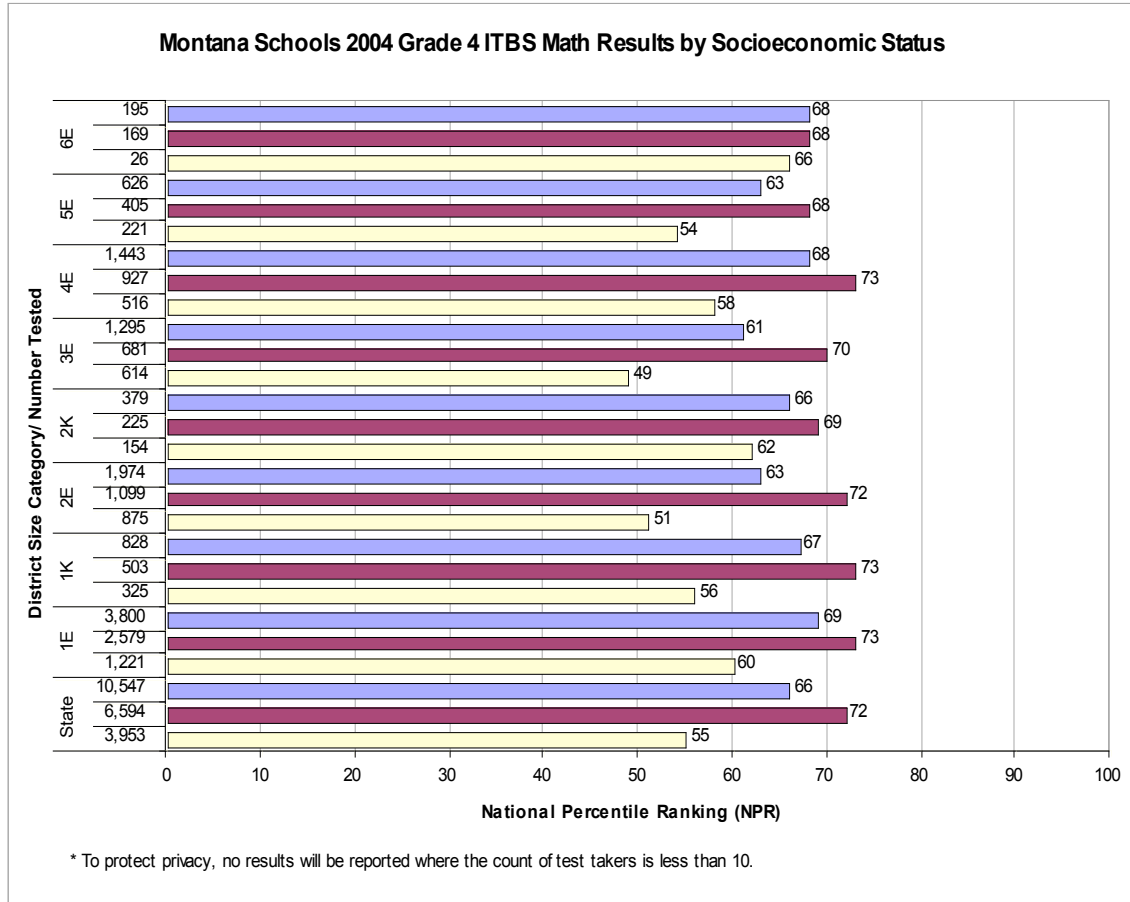
1. All students
 - The Math NPR for all Montana grade 4 students is 66%.
2. Female students
 - Statewide, the NPR for female students is 65%, two percentage points above 2003. That number is stable with all district size categories plus or minus 2-4 percentage points except 3E with 60%.
3. Male students
 - Statewide, the NPR for male students is 67%, three percentage points above 2003. That number is relatively stable with most district size categories plus or minus 4-6 percentage points.
4. Comparisons
 - Statewide, male students scored two percentage points above female students, 67% and 65% respectively. That number is stable.

Chart 4.3 M



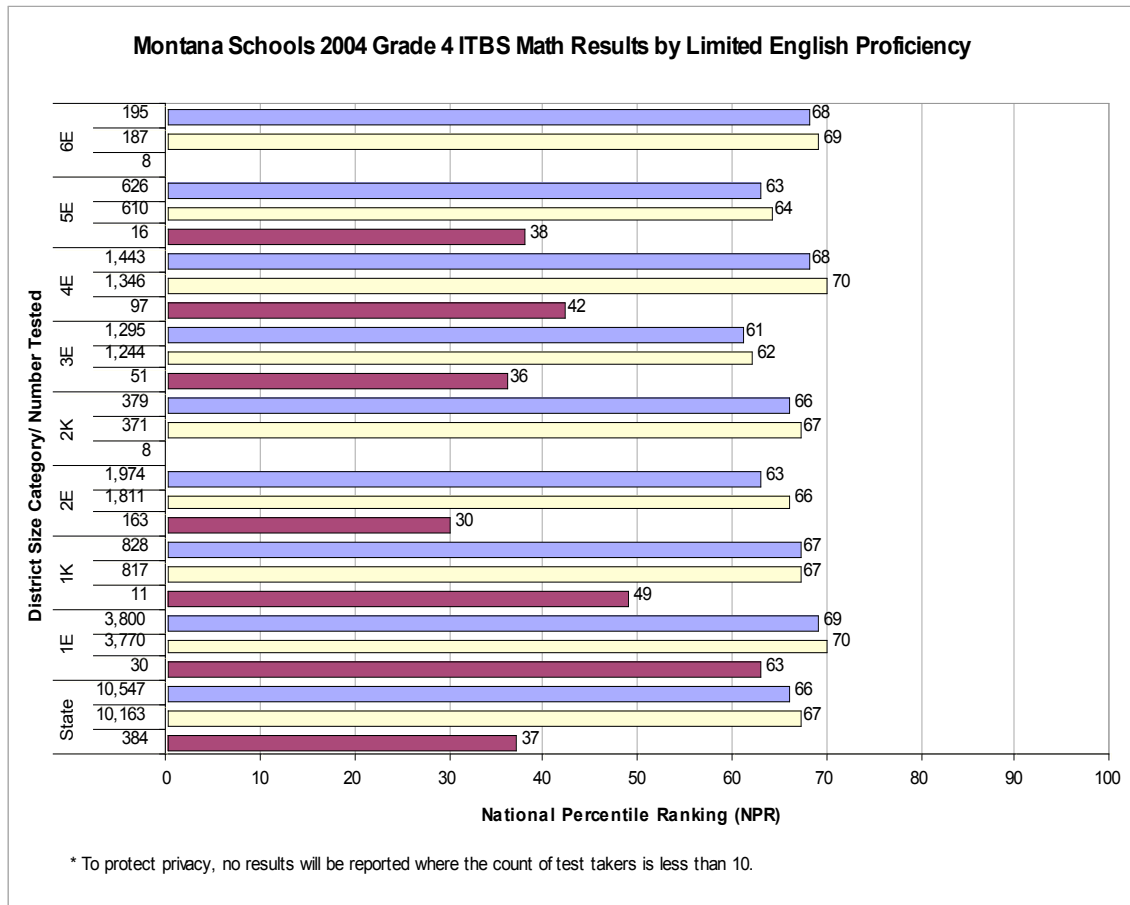
1. All students
 - The Math NPR for all Montana grade 4 students is 66%.
2. Native American students
 - Statewide, the NPR for Native American students is 46%, five percentage points above 2003. That number is relatively stable with most district size categories plus or minus 4-6 percentage points except 1E with an NPR of 54% and in 1K and 6K where the number of Native American students tested is too small for comparison.
3. White students
 - Statewide, the NPR for White students tested is 69%, two percentage points above 2003. That number is stable with all district size categories plus or minus 2-4 percentage points.
4. Comparisons
 - Statewide, Montana White students scored 23 percentage points above Native American students, 69% and 46% respectively. That number is relatively stable.

Chart 4.4 M



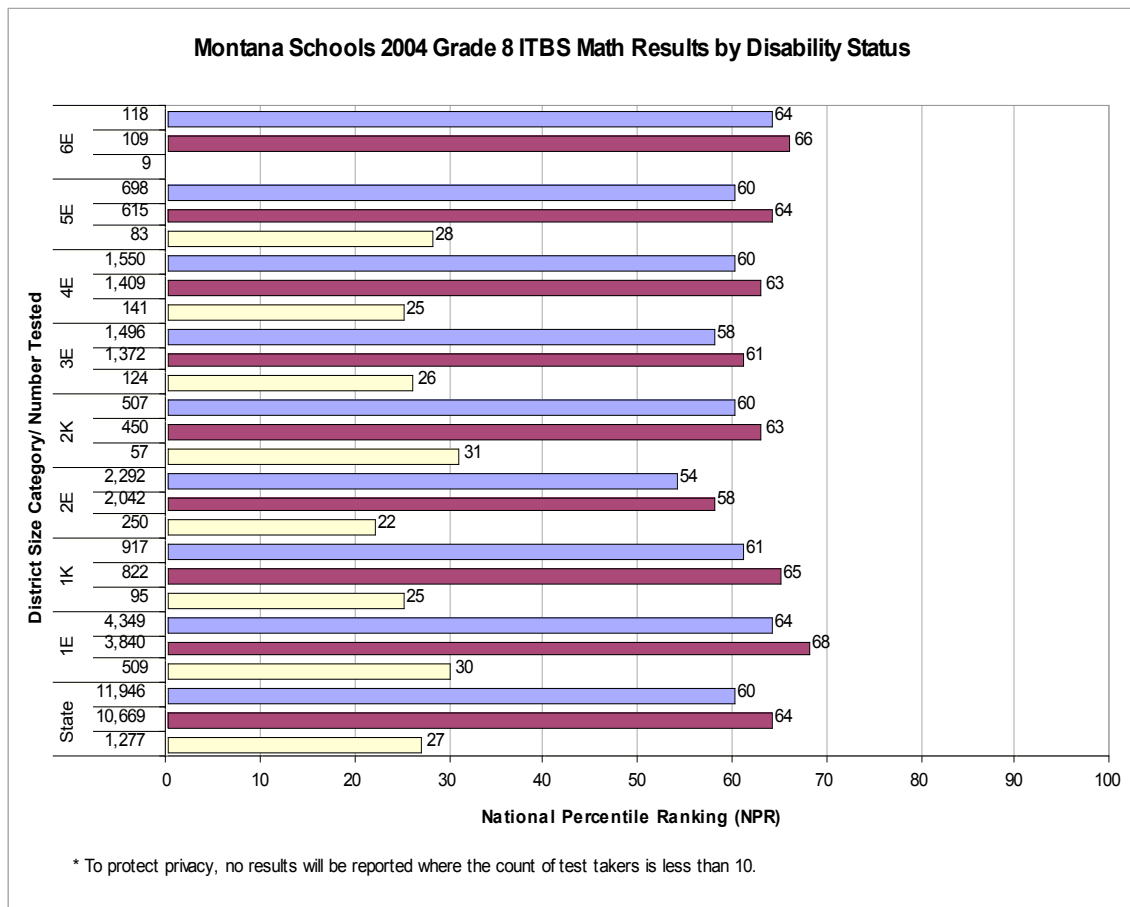
1. All students
 - The Math NPR for all Montana grade 4 students is 66%.
2. Students participating in free/reduced lunch programs
 - Statewide, the NPR for students participating in free/reduced lunch programs is 55%, two percentage points above 2003. That number is relatively stable with most district size categories plus or minus 4-6 percentage points except 6E where the number of students tested is too small for comparisons.
3. Comparisons
 - Statewide, all Montana students scored eleven percentage points above students participating in free/reduced lunch programs, 66% and 55% respectively.

Chart 4.5 M



1. All students
 - The Math NPR for all Montana grade 4 students is 66%.
2. Students with limited English proficiency (LEP)
 - Statewide, the NPR for LEP students is 37%, eight percentage points higher than in 2003. The NPR scores vary among school size categories because of the wide variation in the number of LEP students tested.
3. Comparison
 - Statewide, all Montana students scored 29 percentage points higher than limited English proficient students, 66% and 37% respectively. That number varies among school size categories because of the wide variation in the number of LEP students tested.

Chart 8.1 M



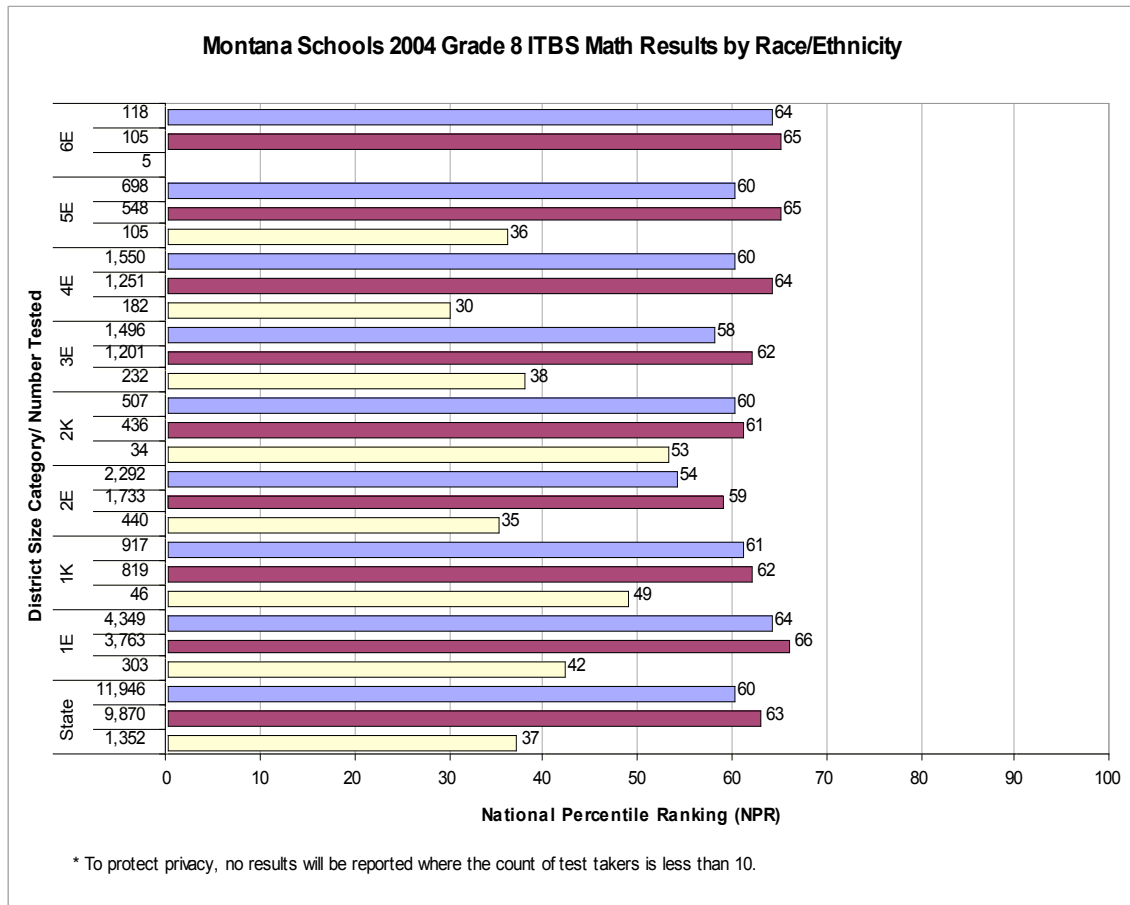
1. All students
 - The Math NPR for all Montana grade 8 students is 60%, one percentage point above 2003.
2. Students without disabilities
 - Statewide, the NPR for students without disabilities is 64%, one percentage point above 2003. That number is relatively stable across the state with most district size categories plus or minus 3-4 percentage points except 2E with 58%.
3. Students with disabilities
 - Statewide, the NPR for students with disabilities is 27%, three percentage points above 2003. That number is relatively stable across the state with all district size categories plus or minus 4-6 percentage points.
4. Comparisons
 - Statewide, Montana students without disabilities scored 37 percentage points above students with disabilities, 64% and 27% respectively. This number is relatively stable across the state.

Chart 8.2 M



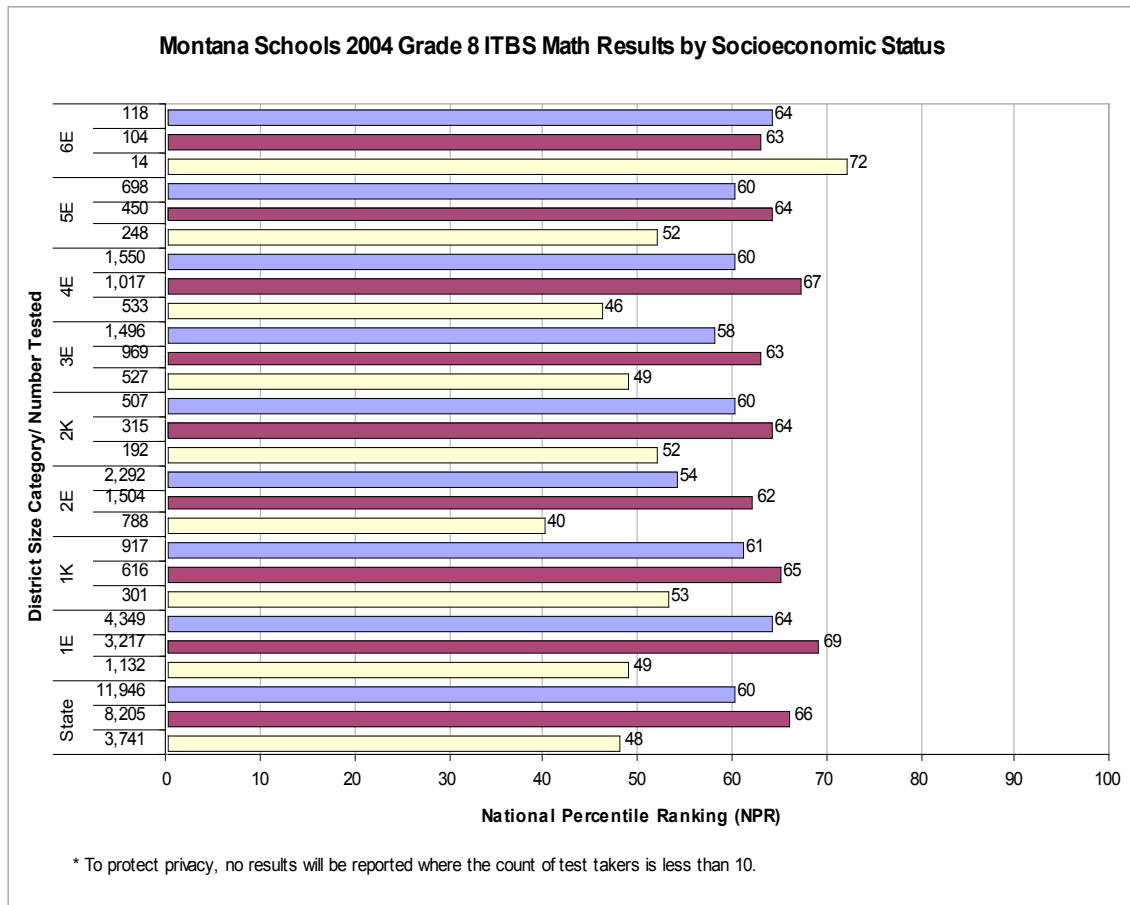
1. All students
 - The Math NPR for all Montana grade 8 students is 60%.
2. Female students
 - Statewide, the NPR for female students is 60%, the same as in 2003. That number is relatively stable with most district size categories plus or minus 2-4 percentage points except 2E with 55%.
3. Male students
 - Statewide, the NPR for male students is 60%, two percentage point above 2003. That number is relatively stable with most district size categories plus or minus 2-4 percentage points except 2E with 54%.
4. Comparisons
 - Statewide, male and female students scored the same.

Chart 8.3 M



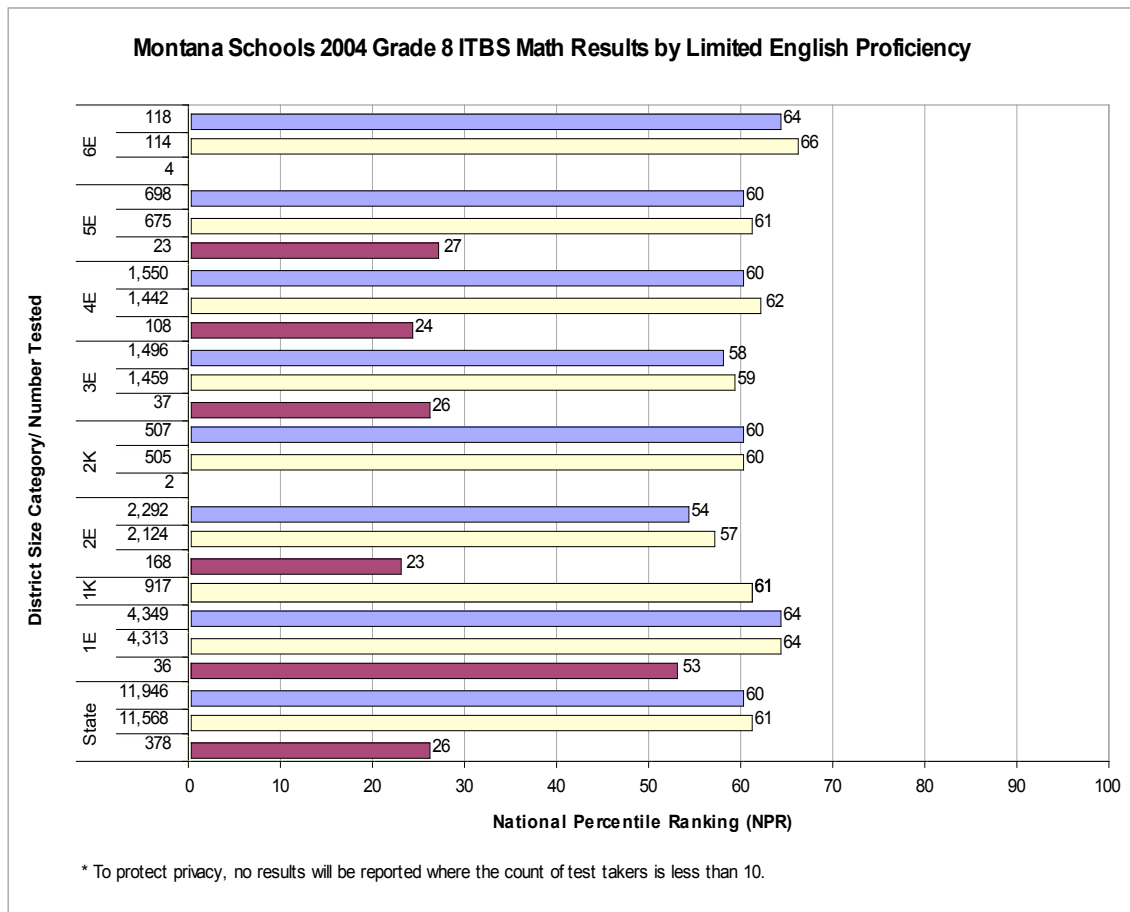
1. All students
 - The Math NPR for all Montana grade 8 students is 60%.
2. Native American students
 - Statewide, the NPR for Native American students is 37%, one percentage point above 2003. That number is relatively stable across the state with most district size categories plus or minus 4-6 percentage points except 4E with 30% and 1K and 2K where the number of Native American students tested is too small for comparisons.
3. White students
 - Statewide, the NPR for White students is 63%, the same as in 2003. That number is relatively stable across the state with all districts plus or minus 4-6 percentage points.
4. Comparisons
 - Statewide, Montana White students scored 26 percentage points above Native American students, 63% and 37% respectively. That number is relatively stable across the state.

Chart 8.4 M



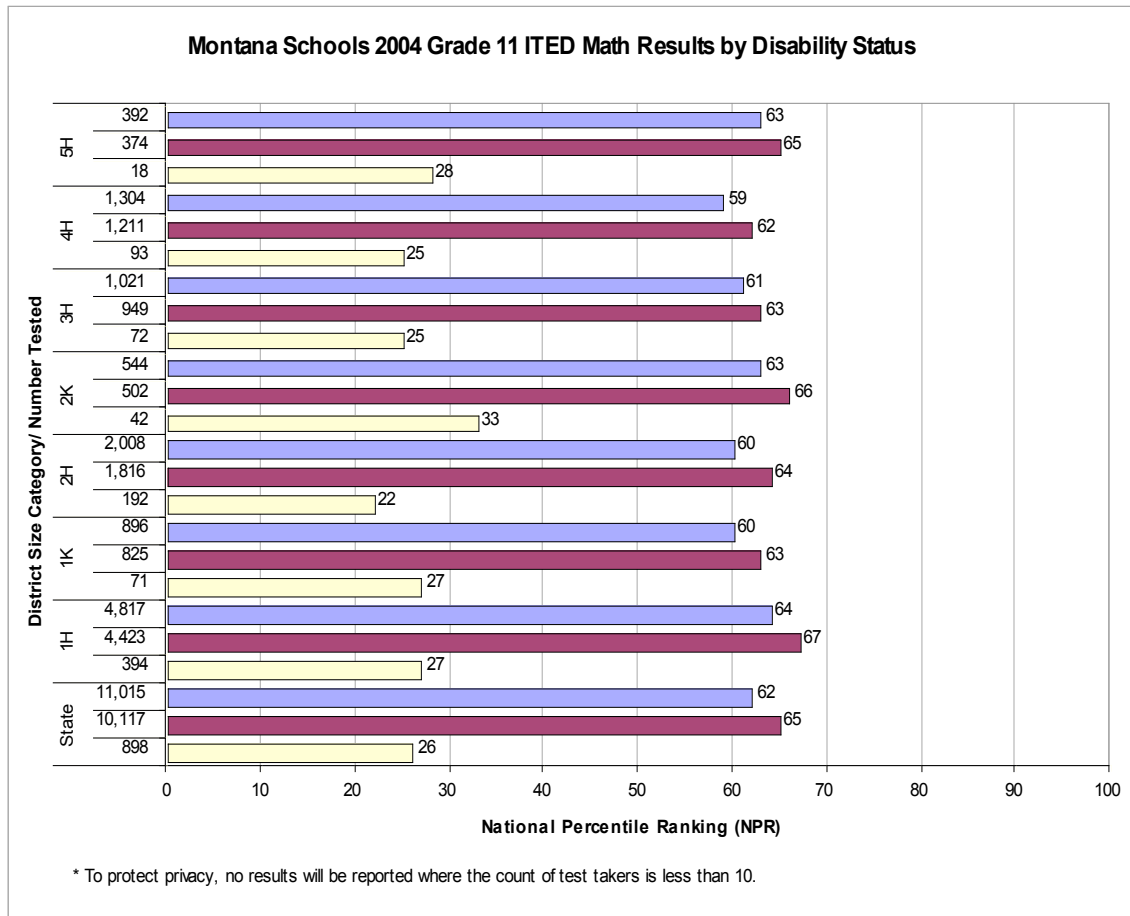
1. All students
 - The Math NPR for all Montana grade 8 students is 60%.
2. Students participating in free/reduced lunch programs
 - Statewide, the NPR for students participating in free/reduced lunch programs is 48%, three percentage points higher than in 2003. That number is somewhat stable with most district size categories plus or minus 4-6 percentage points except 2E with 40%.
3. Comparisons
 - Statewide, all Montana students scored twelve percentage points above students participating in free/reduced lunch programs, 60% and 48% respectively.

Chart 8.5 M



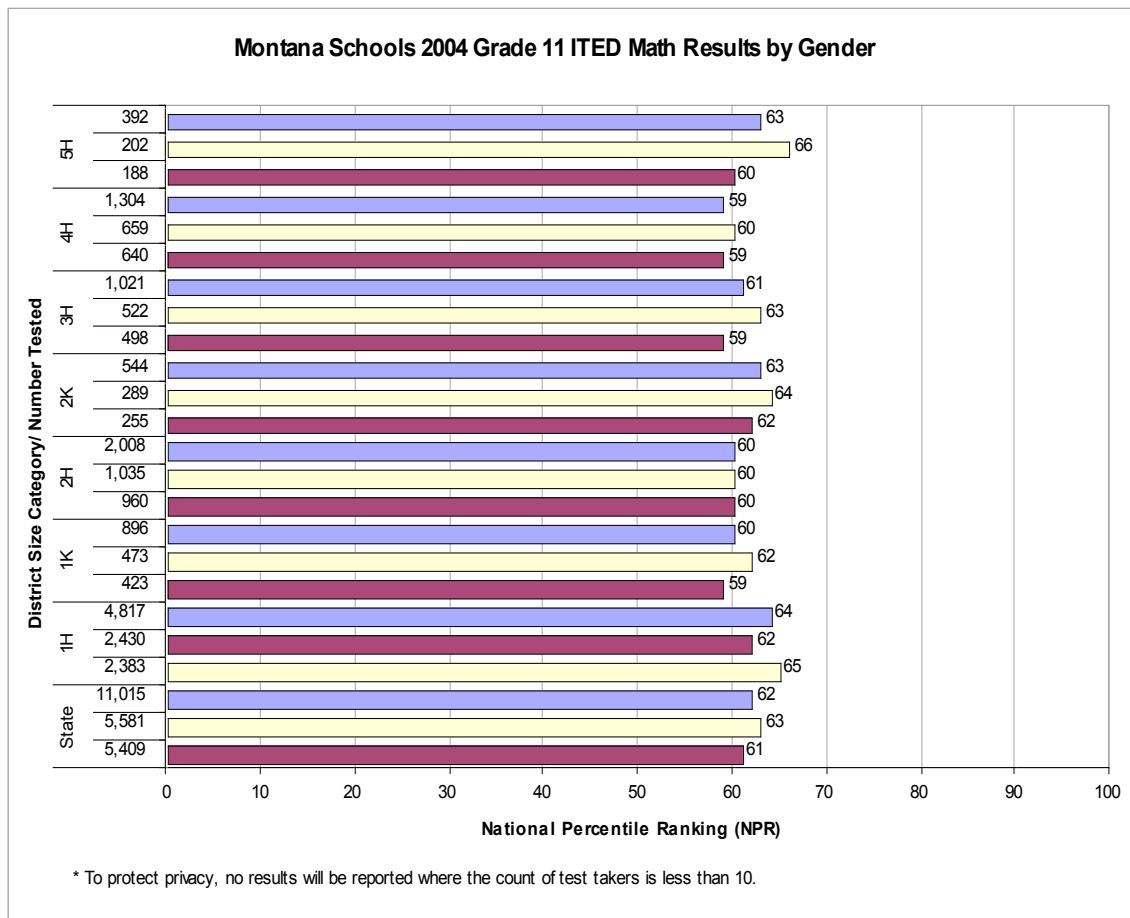
1. All students
 - The Math NPR for all Montana grade 8 students is 60%.
2. Students with limited English proficiency (LEP)
 - Statewide, the NPR for LEP students is 26%, five percentage points above 2003. The NPR scores vary among school size categories because of the wide variation in the number of LEP students tested.
3. Comparison
 - Statewide, all Montana students scored 34 percentage points higher than limited English proficient students, 60% and 26% respectively. That number varies among school size categories because of the wide variation in the number of LEP students tested.

Chart 11.1 M



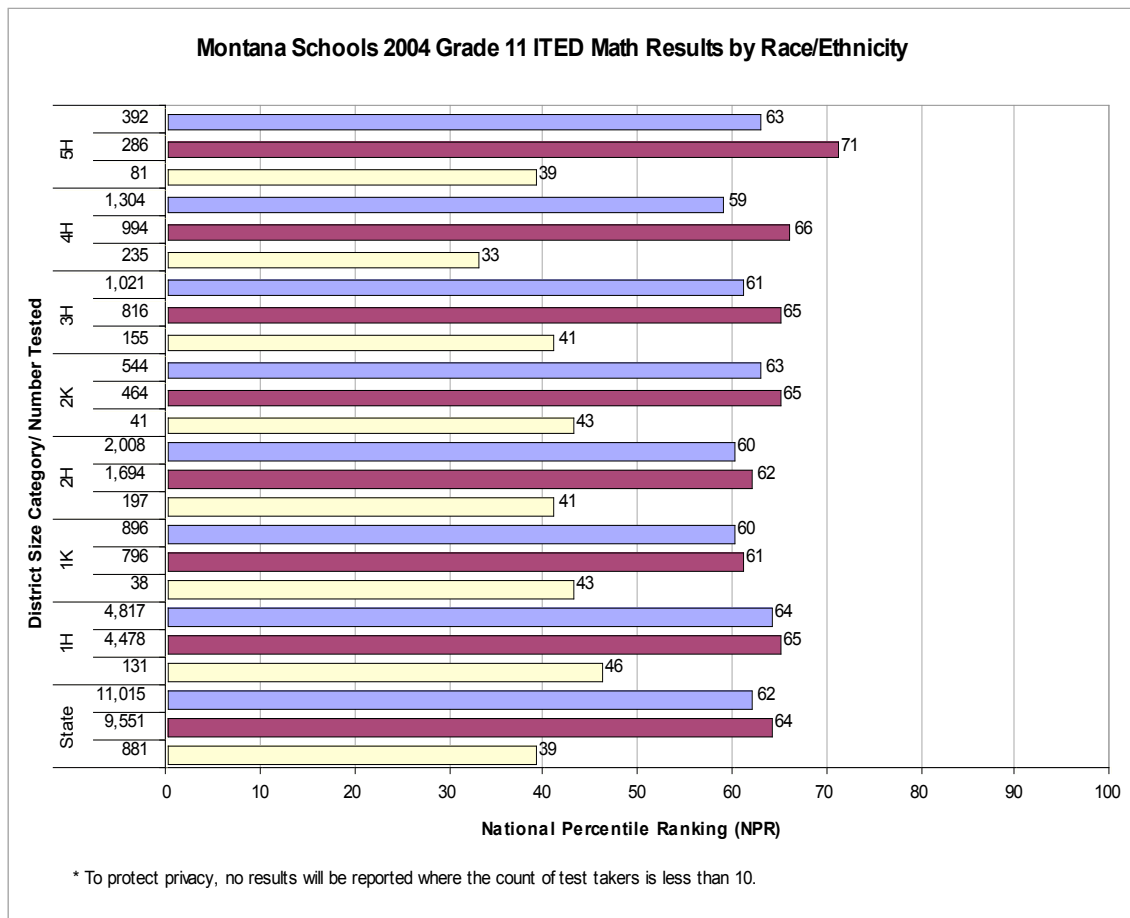
1. All students
 - The Math NPR for all Montana grade 11 students is 62%, the same as in 2003.
2. Students without disabilities
 - Statewide, the NPR for students without disabilities is 65%, the same as in 2003. That number is stable with all district size categories plus or minus 2-4 percentage points.
3. Students with disabilities
 - Statewide, the NPR for students with disabilities 26%, two percentage points below 2003. That number is stable across the state with district size categories plus or minus 2-4 percentage points except 2H where the number of students with disabilities tested is too small for comparisons.
4. Comparisons
 - Statewide, Montana students without disabilities scored 39 percentage points above students with disabilities, 65% and 26% respectively. That number is relatively stable across the state.

Chart 11.2 M



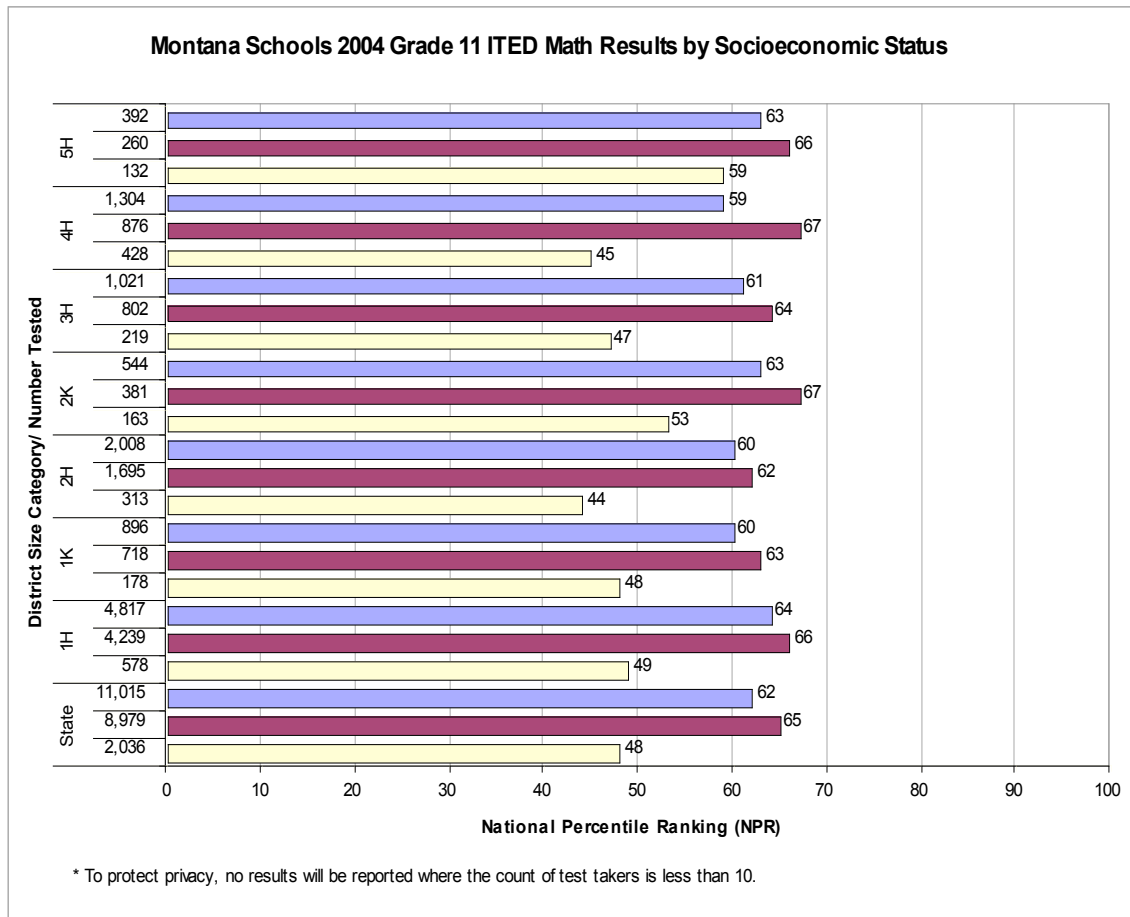
1. All students
 - The Math NPR for all Montana grade 11 students is 62%.
2. Female students
 - Statewide, the NPR for female students 61%, one percentage point below 2003. That number is stable across the state with all district size categories plus or minus 2-4 percentage points.
3. Male students
 - Statewide, the NPR for male students is 63%, the same as in 2003. That number is stable across the state with all district size categories plus or minus 2-4 percentage points.
4. Comparisons
 - Statewide, male students scored two percentage points above female students, 63% and 61% respectively. That number is stable across the state.

Chart 11.3 M



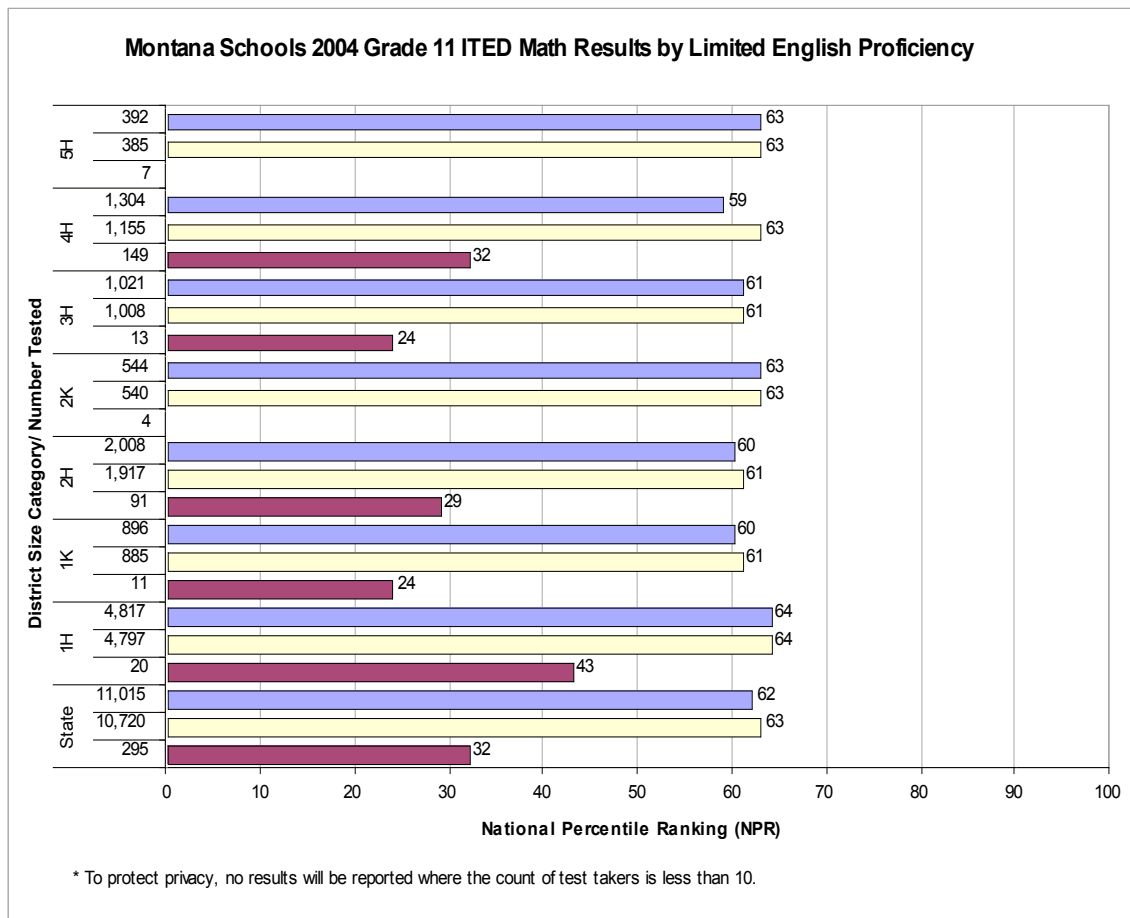
1. All students
 - The Math NPR for all Montana grade 11 students is 62%.
2. Native American students
 - Statewide, the NPR for Native American students is 39%, one percentage point below 2003. That number is relatively stable across the state with most district size categories plus or minus 4-6 percentage points except for size category 1H where the NPR is 46%.
3. White students
 - Statewide, the NPR for White students is 64%, one percentage point below 2003. That number is stable across the state with most district size categories plus or minus 2-4 percentage points except for size category 5H where the NPR is 71%.
4. Comparisons
 - Statewide, Montana White students scored 25 percentage points above Native American students, 64% and 39% respectively. That number is relatively stable across the state.

Chart 11.4 M



1. All students
 - The Math NPR for all Montana grade 11 students is 62%.
2. Students participating in free/reduced lunch programs
 - Statewide, the NPR for students participating in free/reduced lunch programs is 48%, two percentage points below 2003. That number is relatively stable with most district size categories plus or minus 2-4 percentage points except size category 2K where participating students scored 53% and 5H where participating students scored 59%.
3. Comparisons
 - Statewide, all Montana students scored fourteen percentage points above students participating in free/reduced lunch programs, 62% and 48% respectively.

Chart 11.5 M



1. All students
 - The Math NPR for all Montana grade 11 students is 62%.
2. Students with limited English proficiency (LEP)
 - Statewide, the NPR for LEP students is 32%, four percentage points below 2003. The NPR scores vary among school size categories because of the wide variation in the number of LEP students tested.
3. Comparison
 - Statewide, all Montana students scored 30 percentage points above limited English proficient students, 62% and 32% respectively. That number varies among school size categories because of the wide variation in the number of LEP students tested.